

11195206

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SS\$PTA1626GMS

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page for STN Seminar Schedule - N. America
NEWS 2 OCT 02 CA/CAPLUS enhanced with pre-1907 records from Chemisches
Zentralblatt
NEWS 3 OCT 19 BEILSTEIN updated with new compounds
NEWS 4 NOV 15 Derwent Indian patent publication number format enhanced
NEWS 5 NOV 19 WPIX enhanced with XML display format
NEWS 6 NOV 30 ICSD reloaded with enhancements
NEWS 7 DEC 04 LINPADOCDB now available on STN
NEWS 8 DEC 14 BEILSTEIN pricing structure to change
NEWS 9 DEC 17 USPATOLD added to additional database clusters
NEWS 10 DEC 17 IMSDRUGCONF removed from database clusters and STN
NEWS 11 DEC 17 DGENE now includes more than 10 million sequences
NEWS 12 DEC 17 TOXCENTER enhanced with 2008 MeSH vocabulary in
MEDLINE segment
NEWS 13 DEC 17 MEDLINE and LMEDELINE updated with 2008 MeSH vocabulary
NEWS 14 DEC 17 CA/CAPLUS enhanced with new custom IPC display formats
NEWS 15 DEC 17 STN Viewer enhanced with full-text patent content
from USPATOLD
NEWS 16 JAN 02 STN pricing information for 2008 now available
NEWS 17 JAN 16 CAS patent coverage enhanced to include exemplified
prophetic substances
NEWS 18 JAN 28 USPATFULL, USPAT2, and USPATOLD enhanced with new
custom IPC display formats
NEWS 19 JAN 28 MARPAT searching enhanced
NEWS 20 JAN 28 USGENE now provides USPTO sequence data within 3 days
of publication
NEWS 21 JAN 28 TOXCENTER enhanced with reloaded MEDLINE segment
NEWS 22 JAN 28 MEDLINE and LMEDELINE reloaded with enhancements
NEWS 23 FEB 08 STN Express, Version 8.3, now available
NEWS 24 FEB 20 PCI now available as a replacement to DPCI
NEWS 25 FEB 25 IFIREF reloaded with enhancements
NEWS 26 FEB 25 IMSPRODUCT reloaded with enhancements
NEWS 27 FEB 29 WPINDEX/WPIDS/WPIX enhanced with ECLA and current
U.S. National Patent Classification

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items

NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

***** STN Columbus *****

FILE 'HOME' ENTERED AT 11:51:29 ON 06 MAR 2008

=>

Uploading

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE

Do you want to switch to the Registry File?

Choice (Y/n):

Switching to the Registry File...

Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 11:51:50 ON 06 MAR 2008

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 MAR 2008 HIGHEST RN 1006657-22-2

DICTIONARY FILE UPDATES: 4 MAR 2008 HIGHEST RN 1006657-22-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

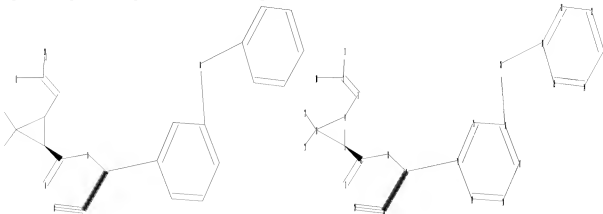
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

11195206

=>

Uploading C:\Program Files\Stnexp\Queries\10539265X.str



```
chain nodes :
1 2 3 6 7 8 9 10 12 13 26 28 29
ring nodes :
4 5 11 14 15 16 17 18 19 20 21 22 23 24 25
chain bonds :
1-2 2-3 2-10 3-4 5-6 6-7 6-8 8-9 9-14 9-28 11-12 11-13 16-26 20-26
28-29
ring bonds :
4-5 4-11 5-11 14-15 14-19 15-16 16-17 17-18 18-19 20-21 20-25 21-22
22-23 23-24 24-25
exact/norm bonds :
6-7 6-8 8-9 16-26 20-26 28-29
exact bonds :
1-2 2-3 2-10 3-4 4-5 4-11 5-6 5-11 9-14 9-28 11-12 11-13
normalized bonds :
14-15 14-19 15-16 16-17 17-18 18-19 20-21 20-25 21-22 22-23 23-24 24-25
isolated ring systems :
containing 4 : 14 : 20 :
```

```
Match level :
1:CLASS 2:CLASS 3:CLASS 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:Atom 12:CLASS 13:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom
19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:CLASS 28:CLASS
29:CLASS
```

Stereo Bonds:

6-5 (Single Wedge).

Stereo Chiral Centers:

5 (Parity=Don't Care)

Stereo RSS Sets:

11195206

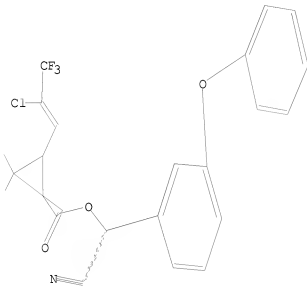
Type=Relative (Default). 1 Nodes= 5

L1 STRUCTURE UPLOADED

=> D L1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> S L1

SAMPLE SEARCH INITIATED 11:52:09 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 26 TO ITERATE

100.0% PROCESSED 26 ITERATIONS

10 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 215 TO 825

PROJECTED ANSWERS: 11 TO 389

L2 10 SEA SSS SAM L1

=> S L1 SSS FULL

FULL SEARCH INITIATED 11:52:16 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 619 TO ITERATE

100.0% PROCESSED 619 ITERATIONS

182 ANSWERS

SEARCH TIME: 00.00.01

L3 182 SEA SSS FUL L1

11195206

=> FIL HCAPLUS
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
178.36	178.57

FULL ESTIMATED COST

FILE 'HCAPLUS' ENTERED AT 11:52:24 ON 06 MAR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 6 Mar 2008 VOL 148 ISS 10
FILE LAST UPDATED: 5 Mar 2008 (20080305/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S L3

L4 1591 L3

=> S L4 AND PROCESS

2577240 PROCESS
1755407 PROCESSES
3841438 PROCESS

(PROCESS OR PROCESSES)

L5 79 L4 AND PROCESS

=> S L5 AND EPIMERISING

4 EPIMERISING
L6 0 L5 AND EPIMERISING

=> S L5 AND EPIMER

5856 EPIMER
4215 EPIMERS
8982 EPIMER

(EPIMER OR EPIMERS)

L7 1 L5 AND EPIMER

=> d l7 ibib abs hitstr tot

L7 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 1994:245553 HCAPLUS

DOCUMENT NUMBER: 120:245553

TITLE: Isomerization process for pyrethroids

INVENTOR(S): Cleugh, Ernest Stephen; Milner, David John

PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK
 SOURCE: Brit. UK Pat. Appl., 11 pp.
 CODEN: BAXXDU
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2262737	A	19930630	GB 1992-25856	19921211
WO 9313053	A2	19930708	WO 1992-GB2323	19921215
WO 9313053	A3	19930805		
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
AU 9230932	A	19930728	AU 1992-30932	19921215
AU 679168	B2	19970626		
EP 618896	A1	19941012	EP 1992-924842	19921215
EP 618896	B1	19960911		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 07502995	T	19950330	JP 1993-511234	19921215
JP 3490083	B2	20040126		
BR 9206983	A	19951205	BR 1992-6983	19921215
HU 71704	A2	19960129	HU 1994-1811	19921215
HU 214673	B	19980428		
AT 142617	T	19960915	AT 1992-924842	19921215
ES 2091497	T3	19961101	ES 1992-924842	19921215
RO 114125	B1	19990129	RO 1994-1080	19921215
RU 2129536	C1	19990427	RU 1994-31154	19921215
CZ 287245	B6	20001011	CZ 1994-1536	19921215
SK 281750	B6	20010710	SK 1994-760	19921215
CA 2126180	C	20030506	CA 1992-2126180	19921215
ZA 9209971	A	19930707	ZA 1992-9971	19921222
US 5334744	A	19940802	US 1992-995861	19921223
FI 9402989	A	19940621	FI 1994-2989	19940621
FI 114465	B1	20041029		
NO 9402400	A	19940811	NO 1994-2400	19940623
NO 300678	B1	19970707		
PRIORITY APPLN. INFO.:			GB 1991-27355	A 19911224
			CS 1994-1536	A 19921215
			WO 1992-GB2323	A 19921215

OTHER SOURCE(S): MARPAT 120:245553

AB A process for obtaining an isomer of a compound of general formula RCH(CN)R' (I), (each of R and R' may be any organic radical linked directly or through a heteroatom to the carbon atom bearing the cyano group provided that at least one of R and R' comprises at least one resolved chiral center) which comprises the step of treating the epimer of the isomer, or the racemate comprising the epimer and the enantiomer of the epimer, in solution in a polar organic solvent, or in slurry in a polar organic liquid diluent in which the epimer or the racemate is partially soluble, with a source of cyanide ions, in the absence of a base, the isomer, or the racemic modification comprising the isomer and its enantiomer, being less soluble in the solvent or diluent than the epimer of the isomer, or the racemate comprising the epimer of the isomer and the enantiomer of the epimer,

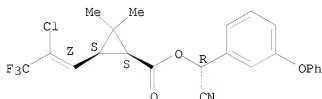
resp. The compound of formula I may be a pyrethroid, e.g. deltamethrin, acrinathrin, S-fenvalerate or λ -cyhalothrin.

IT 91465-08-6, Lambda-Cyhalothrin
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (isomerization of)

RN 91465-08-6 HCAPLUS

CN Cyclopropanecarboxylic acid, 3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propen-1-yl]-2,2-dimethyl-, (R)-cyano(3-phenoxyphenyl)methyl ester, (1S,3S)-rel-
 (CA INDEX NAME)

Relative stereochemistry.
 Double bond geometry as shown.



=> D HIS

(FILE 'HOME' ENTERED AT 11:51:29 ON 06 MAR 2008)

FILE 'REGISTRY' ENTERED AT 11:51:50 ON 06 MAR 2008

L1 STRUCTURE UPLOADED

L2 10 S L1

L3 182 S L1 SSS FULL

FILE 'HCAPLUS' ENTERED AT 11:52:24 ON 06 MAR 2008

L4 1591 S L3

L5 79 S L4 AND PROCESS

L6 0 S L5 AND EPIMERISING

L7 1 S L5 AND EPIMER

=> S L5 AND CYANIDE

86635 CYANIDE

16753 CYANIDES

93153 CYANIDE

(CYANIDE OR CYANIDES)

L8 5 L5 AND CYANIDE

=> S L8 AND PY<=2002

22929125 PY<=2002

L9 3 L8 AND PY<=2002

=> d l8 ibib abs hitstr tot

L8 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 2007:1264465 HCAPLUS

DOCUMENT NUMBER: 147:463103

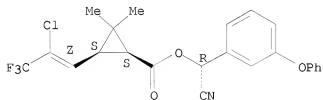
TITLE: Incidents of bee poisoning with pesticides in the United Kingdom, 1994-2003

AUTHOR(S): Barnett, Elizabeth A.; Charlton, Andrew J.; Fletcher, Mark R.
 CORPORATE SOURCE: Central Science Laboratory, Wildlife Incident Unit, Sand Hutton, York, YO41 1LZ, UK
 SOURCE: Pest Management Science (2007), 63(11), 1051-1057
 CODEN: PMSFCF; ISSN: 1526-498X
 PUBLISHER: John Wiley & Sons Ltd.
 DOCUMENT TYPE: Journal; General Review
 LANGUAGE: English

AB A review. For over 20 years, the UK Agriculture Departments have monitored the direct effects of pesticides on beneficial insects, mainly honeybees (*Apis mellifera*, L.) and bumblebees (*Bombus terrestris*, L.), as part of the Wildlife Incident Investigation Scheme (WIIS). The Central Science Laboratory (CSL) has contributed to WIIS by providing the required laboratory skills for the determination of bee diseases and the expert anal. experience necessary to determine low-level pesticide residues and interpret these results. The results from WIIS form part of the pesticide regulatory process coordinated by the Pesticides Safety Directorate (PSD) and are published each year. This paper has reviewed the data from WIIS over the 10 yr period from 1994 to 2003. The overall trend is that suspected poisoning incidents, reported by beekeepers and the general public, have declined from 56 incidents per yr to 23 incidents per yr. The number of these incidents that have been attributed to pesticide poisoning has also declined, from 25 incidents to five incidents per yr. The possible reasons for these changes and the circumstances involved in the bee poisoning incidents are discussed. However, the source of the pesticide in bee poisoning incidents is often uncertain and the likely cause of these incidents and any trends over time are also discussed.

IT 91465-08-6
 RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (lambda-Cyhalothrin; incidents of bee poisoning with pesticides in United Kingdom, 1994-2003)
 RN 91465-08-6 HCAPLUS
 CN Cyclopropanecarboxylic acid, 3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propen-1-yl]-2,2-dimethyl-, (R)-cyano(3-phenoxyphenyl)methyl ester, (1S,3S)-rel- (CA INDEX NAME)

Relative stereochemistry.
 Double bond geometry as shown.



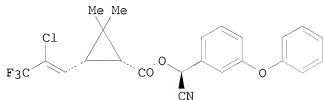
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2004:550933 HCAPLUS
 DOCUMENT NUMBER: 141:106633
 TITLE: Production process for the preparation of

INVENTOR(S): gamma-cyhalothrin
Brown, Stephen Martin; Gott, Brian David
PATENT ASSIGNEE(S): Syngental Limited, UK
SOURCE: PCT Int. Appl., 13 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004056752	A1	20040708	WO 2003-GB5450	20031209
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2510272	A1	20040708	CA 2003-2510272	20031209
AU 2003295110	A1	20040714	AU 2003-295110	20031209
EP 1578720	A1	20050928	EP 2003-786111	20031209
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003017454	A	20051116	BR 2003-17454	20031209
CN 1729161	A	20060201	CN 2003-80106869	20031209
JP 2006510704	T	20060330	JP 2004-561617	20031209
US 2006100457	A1	20060511	US 2005-539265	20050616
IN 2005CN01308	A	20070615	IN 2005-CN1308	20050617
PRIORITY APPLN. INFO.:			GB 2002-29803	A 20021220
			WO 2003-GB5450	W 20031209

OTHER SOURCE(S): CASREACT 141:106633
GI



I

AB A process was disclosed for the preparation of gamma-cyhalothrin (I) which comprised converting (1R,3R)-3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propenyl]-2,2-dimethylcyclopropanecarboxylic acid to its acid chloride, esterifying the acid chloride with 3-phenoxy benzaldehyde in the presence of a source of cyanide to form a diastereoisomeric mixture of cyhalothrin isomers, and epimerization of the diastereoisomeric mixture

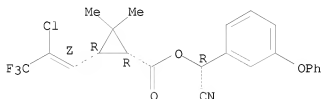
under conditions in which the least soluble diastereoisomer crystallizes from solution

IT 76703-63-4P
 RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (process for the preparation of gamma-cyhalothrin via an esterification-cyanation/epimerization sequence)

RN 76703-63-4 HCAPLUS

CN Cyclopropanecarboxylic acid, 3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propenyl]-2,2-dimethyl-, (R)-cyano(3-phenoxyphenyl)methyl ester, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

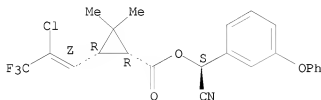


IT 76703-62-3P
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
 (process for the preparation of gamma-cyhalothrin via an esterification-cyanation/epimerization sequence)

RN 76703-62-3 HCAPLUS

CN Cyclopropanecarboxylic acid, 3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propenyl]-2,2-dimethyl-, (S)-cyano(3-phenoxyphenyl)methyl ester, (1R,3R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
 Double bond geometry as shown.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

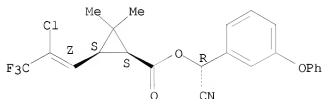
L8 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2008 ACS ON STN
 ACCESSION NUMBER: 2002:108924 HCAPLUS
 DOCUMENT NUMBER: 136:243283
 TITLE: Thermal decomposition and isomerization of cis-permethrin and β -cypermethrin in the solid phase
 AUTHOR(S): Gonzalez Audino, Paola; Licastro, Susana A.; Zerba, Eduardo

CORPORATE SOURCE: Centro de Investigaciones de Plagas e Insecticidas
(CIPEIN-CITEFA/CONICET), Buenos Aires, 1603, Argent.
SOURCE: Pest Management Science (2002), 58(2), 183-189
CODEN: PMSCFC; ISSN: 1526-498X
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The stability to heat of *cis*-permethrin and β -cypermethrin in the solid phase was studied and the decomposition products identified. Samples heated at 210°C in an oven in the dark showed that, in the absence of potassium chlorate (the salt present in smoke-generating formulations of these pyrethroids), *cis*-permethrin was not isomerized, although in the presence of that salt, decomposition was greater and thermal isomerization occurred. Other salts of the type KXO_3 or $NaXO_3$, with X being halogen or nitrogen, also led to a considerable thermal isomerization. Heating the insecticides in solution in the presence of potassium chlorate did not produce isomerization in any of the solvents assayed. Salt-catalyzed thermal *cis*-trans isomerization was also found for other pyrethroids derived from permethrinic or deltamethrinic acid but not for those derived from chrysanthemic acid. The main thermal degradation processes of *cis*-permethrin and β -cypermethrin decomposition when potassium chlorate was present were cyclopropane isomerization, ester cleavage and subsequent oxidation of the resulting products. Permethrinic acid, 3-phenoxybenzyl chloride, alc., aldehyde and acid were identified in both cases, as well as 3-phenoxybenzyl cyanide from β -cypermethrin. A similar decomposition pattern occurred after combustion of pyrethroid fumigant formulations.

IT 91465-08-6
RL: PEP (Physical, engineering or chemical process); REM (Removal or disposal); PROC (Process)
(thermal decomposition and isomerization in solid phase in presence of)
RN 91465-08-6 HCAPLUS
CN Cyclopropanecarboxylic acid, 3-[(1*Z*)-2-chloro-3,3,3-trifluoro-1-propen-1-yl]-2,2-dimethyl-, (R)-cyano(3-phenoxyphenyl)methyl ester, (1*S*,3*S*)-rel- (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:245553 HCAPLUS
DOCUMENT NUMBER: 120:245553
TITLE: Isomerization process for pyrethroids
INVENTOR(S): Cleugh, Ernest Stephen; Milner, David John
PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK

SOURCE: Brit. UK Pat. Appl., 11 pp.
 CODEN: BAXXDU
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

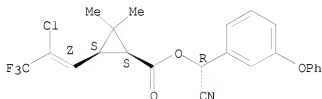
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2262737	A	19930630	GB 1992-25856	19921211
WO 9313053	A2	19930708	WO 1992-GB2323	19921215
WO 9313053	A3	19930805		
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
AU 9230932	A	19930728	AU 1992-30932	19921215
AU 679168	B2	19970626		
EP 618896	A1	19941012	EP 1992-924842	19921215
EP 618896	B1	19960911		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 07502995	T	19950330	JP 1993-511234	19921215
JP 3490083	B2	20040126		
BR 9206983	A	19951205	BR 1992-6983	19921215
HU 71704	A2	19960129	HU 1994-1811	19921215
HU 214673	B	19980428		
AT 142617	T	19960915	AT 1992-924842	19921215
ES 2091497	T3	19961101	ES 1992-924842	19921215
RO 114125	B1	19990129	RO 1994-1080	19921215
RU 2129536	C1	19990427	RU 1994-31154	19921215
CZ 287245	B6	20001011	CZ 1994-1536	19921215
SK 281750	B6	20010710	SK 1994-760	19921215
CA 2126180	C	20030506	CA 1992-2126180	19921215
ZA 9209971	A	19930707	ZA 1992-9971	19921222
US 5334744	A	19940802	US 1992-995861	19921223
FI 9402989	A	19940621	FI 1994-2989	19940621
FI 114465	B1	20041029		
NO 9402400	A	19940811	NO 1994-2400	19940623
NO 300678	B1	19970707		
PRIORITY APPLN. INFO.:			GB 1991-27355	A 19911224
			CS 1994-1536	A 19921215
			WO 1992-GB2323	A 19921215

OTHER SOURCE(S): MARPAT 120:245553

AB A process for obtaining an isomer of a compound of general formula RCH(CN)R' (I), (each of R and R' may be any organic radical linked directly or through a heteroatom to the carbon atom bearing the cyano group provided that at least one of R and R' comprises at least one resolved chiral center) which comprises the step of treating the epimer of the isomer, or the racemate comprising the epimer and the enantiomer of the epimer, in solution in a polar organic solvent, or in slurry in a polar organic liquid diluent in which the epimer or the racemate is partially soluble, with a source of cyanide ions, in the absence of a base, the isomer, or the racemic modification comprising the isomer and its enantiomer, being less soluble in the solvent or diluent than the epimer of the isomer, or the racemate comprising the epimer of the isomer and the enantiomer of the epimer, resp. The compound of formula I may be a pyrethroid, e.g. deltamethrin, acrinathrin, S-fenvalerate or λ -cyhalothrin.

IT 91465-08-6, Lambda-Cyhalothrin
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (isomerization of)
 RN 91465-08-6 HCAPLUS
 CN Cyclopropanecarboxylic acid, 3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propen-1-yl]-2,2-dimethyl-, (R)-cyano(3-phenoxyphenyl)methyl ester, (1S,3S)-rel-
 (CA INDEX NAME)

Relative stereochemistry.
 Double bond geometry as shown.



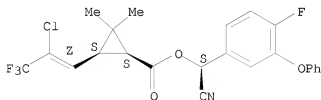
L8 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1986:202336 HCAPLUS
 DOCUMENT NUMBER: 104:202336
 ORIGINAL REFERENCE NO.: 104:31955a,31958a
 TITLE: Insecticidal cyclopropane carboxylic acid ester
 INVENTOR(S): Doyle, Peter; Whittle, Alan John
 PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK
 SOURCE: Brit. UK Pat. Appl., 8 pp.
 CODEN: BAXXDU
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2161804	A	19860122	GB 1985-15651	19850620
EP 171894	A1	19860219	EP 1985-304415	19850620
EP 171894	B1	19890419		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AT 42275	T	19890515	AT 1985-304415	19850620
US 4670464	A	19870602	US 1985-749276	19850627
AU 8544293	A	19860123	AU 1985-44293	19850628
AU 593213	B2	19900208		
CA 1263402	A1	19891128	CA 1985-485894	19850628
IL 75689	A	19881130	IL 1985-75689	19850701
HU 39976	A2	19861128	HU 1985-2706	19850715
HU 201454	B	19901128		
BR 8503387	A	19860408	BR 1985-3387	19850716
JP 61036252	A	19860220	JP 1985-157114	19850718
JP 07030005	B	19950405		
ES 545337	A1	19860716	ES 1985-545337	19850718
CN 85105604	A	19870128	CN 1985-105604	19850723
CN 1015362	B	19920205		
PRIORITY APPLN. INFO.:			GB 1984-18331	A 19840718
			EP 1985-304415	A 19850620

GB 1985-15651 A 19850620

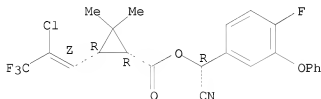
- AB A process is described by which the pair of isomers represented by (R)- α -cyano-4-fluoro-3-phenoxybenzyl (1R,cis)-3-(Z-2-chloro-3,3,3-trifluoroprop-1-en-1-yl)-2,2-dimethylcyclopropane carboxylate and its enantiomer is converted by base-catalyzed epimerization in solution into the insecticidally more useful isomer pair represented by (S)- α -cyano-4-fluoro-3-phenoxybenzyl (1R,cis)-3-(Z-2-chloro-3,3,3-trifluoroprop-1-en-1-yl)-2,2-dimethylcyclopropanecarboxylate and its enantiomer, which may then be caused to crystallize out from the solution. Thus, the isomer pair obtained had higher topical toxicity against tobacco budworm (*Heliothis virescens*) larvae than the standard Cyhalothrin and Cyfluthrin.
- IT 102281-46-9P 102281-47-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
- RN 102281-46-9 HCAPLUS
- CN Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl-, cyano(4-fluoro-3-phenoxyphenyl)methyl ester, [1S-[1 α (R*),3 α (Z)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



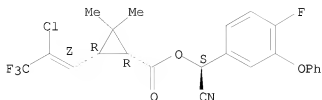
- RN 102281-47-0 HCAPLUS
- CN Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl-, cyano(4-fluoro-3-phenoxyphenyl)methyl ester, [1R-[1 α (R*),3 α (Z)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



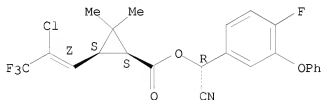
- IT 102281-48-1P 102281-49-2P
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of, as insecticide)
- RN 102281-48-1 HCAPLUS
- CN Cyclopropanecarboxylic acid, 3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propenyl]-2,2-dimethyl-, (S)-cyano(4-fluoro-3-phenoxyphenyl)methyl ester, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 102281-49-2 HCAPLUS
CN Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl-, cyano(4-fluoro-3-phenoxyphenyl)methyl ester, [1S-[1α(S*),3α(Z)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



=> D HIS

(FILE 'HOME' ENTERED AT 11:51:29 ON 06 MAR 2008)

FILE 'REGISTRY' ENTERED AT 11:51:50 ON 06 MAR 2008

L1 STRUCTURE UPLOADED

L2 10 S L1

L3 182 S L1 SSS FULL

FILE 'HCAPLUS' ENTERED AT 11:52:24 ON 06 MAR 2008

L4 1591 S L3

L5 79 S L4 AND PROCESS

L6 0 S L5 AND EPIMERISING

L7 1 S L5 AND EPIMER

L8 5 S L5 AND CYANIDE

L9 3 S L8 AND PY<=2002

=> S L8 AND EPIMERISING

4 EPIMERISING

L10 0 L8 AND EPIMERISING

=> S L8 AND EPIMER

5856 EPIMER

4215 EPIMERS

8982 EPIMER

(EPIMER OR EPIMERS)

L11 1 L8 AND EPIMER

=> d l11 ibib abs hitstr tot

L11 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:245553 HCAPLUS
 DOCUMENT NUMBER: 120:245553
 TITLE: Isomerization process for pyrethroids
 INVENTOR(S): Cleugh, Ernest Stephen; Milner, David John
 PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK
 SOURCE: Brit. UK Pat. Appl., 11 pp.
 CODEN: BAXXDU

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2262737	A	19930630	GB 1992-25856	19921211
WO 9313053	A2	19930708	WO 1992-GB2323	19921215
WO 9313053	A3	19930805		
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
AU 9230932	A	19930728	AU 1992-30932	19921215
AU 679168	B2	19970626		
EP 618896	A1	19941012	EP 1992-924842	19921215
EP 618896	B1	19960911		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 07502995	T	19950330	JP 1993-511234	19921215
JP 3490083	B2	20040126		
BR 9206983	A	19951205	BR 1992-6983	19921215
HU 71704	A2	19960129	HU 1994-1811	19921215
HU 214673	B	19980428		
AT 142617	T	19960915	AT 1992-924842	19921215
ES 2091497	T3	19961101	ES 1992-924842	19921215
RO 114125	B1	19990129	RO 1994-1080	19921215
RU 2129536	C1	19990427	RU 1994-31154	19921215
CZ 287245	B6	20001011	CZ 1994-1536	19921215
SK 281750	B6	20010710	SK 1994-760	19921215
CA 2126180	C	20030506	CA 1992-2126180	19921215
ZA 9209971	A	19930707	ZA 1992-9971	19921222
US 5334744	A	19940802	US 1992-995861	19921223
FI 9402989	A	19940621	FI 1994-2989	19940621
FI 114465	B1	20041029		
NO 9402400	A	19940811	NO 1994-2400	19940623
NO 300678	B1	19970707		
PRIORITY APPLN. INFO.:			GB 1991-27355	A 19911224
			CS 1994-1536	A 19921215
			WO 1992-GB2323	A 19921215

OTHER SOURCE(S): MARPAT 120:245553

AB A process for obtaining an isomer of a compound of general formula RCH(CN)R' (I), (each of R and R' may be any organic radical linked directly or through a heteroatom to the carbon atom bearing the cyano group

provided that at least one of R and R' comprises at least one resolved chiral center) which comprises the step of treating the epimer of the isomer, or the racemate comprising the epimer and the enantiomer of the epimer, in solution in a polar organic solvent, or in slurry in a polar organic liquid diluent in which the epimer or the racemate is partially soluble, with a source of cyanide ions, in the absence of a base, the isomer, or the racemic modification comprising the isomer and its enantiomer, being less soluble in the solvent or diluent than the epimer of the isomer, or the racemate comprising the epimer of the isomer and the enantiomer of the epimer, resp. The compound of formula I may be a pyrethroid, e.g. deltamethrin, acrinathrin, S-fenvalerate or λ -cyhalothrin.

IT 91465-08-6, Lambda-Cyhalothrin

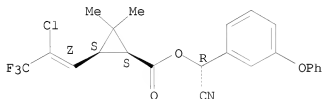
RL: RCT (Reactant); RACT (Reactant or reagent)
(isomerization of)

RN 91465-08-6 HCAPLUS

CN Cyclopropanecarboxylic acid, 3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propen-1-yl]-2,2-dimethyl-, (R)-cyano(3-phenoxyphenyl)methyl ester, (1S,3S)-rel-
(CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



=> LOG Y

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION

FULL ESTIMATED COST

110.78	289.35
--------	--------

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-5.60	-5.60

CA SUBSCRIBER PRICE

STN INTERNATIONAL LOGOFF AT 12:08:37 ON 06 MAR 2008